

**PUBLIC SERVICE COMMISSION OF SOUTH
CAROLINA**

DOCKET NO. 2012-8-E

IN THE MATTER OF:)	
)	
Progress Energy Carolinas, Inc.'s)	COMMENTS OF
Integrated Resource Plan (IRP))	NUCOR STEEL –
)	SOUTH CAROLINA
)	

Pursuant to South Carolina Public Service Commission Order Nos. 2012-95, 2012-895, and 2013-34, Nucor Steel-South Carolina ("Nucor"), a Division of Nucor Corporation, hereby submits the following comments on Progress Energy Carolinas, Inc.'s ("PEC") 2012 Integrated Resource Plan ("IRP").

I. INTRODUCTION

This proceeding addresses PEC's 2012 IRP, which is the document filed periodically by PEC with this Commission providing an overview of its evolving plans to supply sufficient electric capacity and energy to meet its expected customer needs. The IRP reflects PEC's current long-range forecasts of its expected load, capital costs, and fuel costs, as well as projected changes in demand and supply-side resources to serve its expected load. Even though the IRP is based only on forecasts, assumptions and currently available information and will, by necessity, change in the future, IRPs are of particular interest to customers like Nucor, for whom electric energy is a major cost of doing business. IRPs provide some high level insight into a utility's planning process and strategy, as well as other factors that could ultimately affect the long-term cost of electric service to customers.

In these comments, we offer some recommendations on the Commission's IRP review process in this proceeding, as well as some observations about PEC's IRP. Given the nature of the IRP and this proceeding, the complexity of resource planning and the limited information available at this point, our comments are necessarily general, brief and limited. We reserve the right to provide additional comments if necessary and

appropriate and to take any other positions as this proceeding continues. Moreover, our failure to address anything in the IRP or any issues raised by the IRP in these comments should not be construed as agreement therewith.

II. SUMMARY OF COMMENTS AND RECOMMENDATIONS

Nucor's primary recommendation on the IRP review process can be summarized as follows:

- As a planning document, the load forecasts and resource projections contained in PEC's IRP are subject to and will change over time; this is particularly true due to the recent Duke/Progress merger. Consistent with Commission precedent, this IRP proceeding is not the place to approve PEC's forecasts or plans or to determine the reasonableness of PEC's planned resources or its expenditures on such resources. To conduct a detailed review and assessment of the IRP and the information contained in it would require, at a minimum, a far more extensive process than is contemplated in this proceeding. As a result, we recommend that the Commission clarify that PEC's IRP proceedings continue to be primarily informational. If the Commission issues any order on the PEC IRP, we recommend that the Commission simply determine whether PEC has provided the information required by statute to be included in the IRP, without approving (or disapproving) any aspect of the IRP, and in particular, the choice of specific supply-side or demand-side resources or programs discussed in the IRP.

Nucor offers the following additional observations and recommendations regarding the PEC IRP:

- The IRP demonstrates that significant changes to the generating resource mix for PEC's system have been and will be occurring in the near term after a long period of relative stability. These changes appear to be driven in large part by PEC's decisions to retire substantial coal-fired generation, build new natural gas-fired generation, and to merge with Duke. These changes could have significant impacts on the cost of electric service to PEC's customers, and we recommend that the Commission apply appropriate scrutiny and regulatory oversight to PEC's resource decisions and associated costs in the appropriate rate-related proceedings.
- The IRP discusses "Renewable Energy Requirements" in the context of North Carolina mandates to acquire renewable energy. Unlike North Carolina, there is no renewable energy portfolio requirement in South Carolina. The costs of renewables often exceed the costs of other viable, more cost

effective resource alternatives. As with other aspects of the IRP, we do not recommend that the Commission evaluate these resources and associated costs in this proceeding, particularly since PEC apparently has no option under North Carolina law but to acquire these resources. However, we do recommend that the Commission apply appropriate scrutiny and regulatory oversight to these resources and costs in the appropriate rate-related proceedings to the degree PEC seeks to recover the costs related to these resources from South Carolina customers.

- The IRP discusses the analysis of PEC's reserve margin target conducted in response to an order by the North Carolina Utilities Commission. According to the IRP, PEC has adopted a minimum target reserve margin and target range. Establishing a reasonable reserve margin target is important for planning and generally should be reassessed periodically by the utility. Once PEC has been more fully integrated with Duke, a reassessment will be important to determine if the two operating companies can utilize their larger size and combined resources to reduce their individual reserve requirements. As with other aspects of the IRP, we do not recommend that the Commission make any findings on the appropriate reserve margin for PEC in this proceeding.
- The load forecast for the IRP should appropriately reflect the benefits of PEC's demand side management ("DSM") and energy efficiency ("EE") program portfolio, including the positive effects of rate designs such as curtailable and time-of-use rates, in reducing PEC's firm peak demand. It appears, at least based on a limited review of the information in the IRP, that the PEC load forecast meets this objective. By reducing peak demand, as shown in the IRP, PEC can avoid or defer the need for a proportional amount of new capacity, as well as the reserves associated with that avoided capacity.
- PEC's DSM/EE programs should remain subject to Commission review and oversight and PEC should continue to make available reasonable and appropriate DSM/EE programs to South Carolina customers who wish to participate in such programs through the DSM/EE mechanism approved by the Commission in Docket No. 2008-251-E. In accordance with the Commission's Order in Docket No. 2008-251-E, PEC should continue to recover its costs of such programs under PEC's DSM/EE rider and large commercial and industrial customers appropriately should retain the option to opt-out of PEC's DSM/EE rider, in recognition that such customers already have a strong incentive to implement their own DSM and EE measures if they have the ability to do so.

III. COMMENTS

A. Overview and Purpose of the IRP Process

As the Commission has stated, the “IRP process is an important planning tool for the Companies and the Commission.”¹ South Carolina utilities must prepare and submit IRPs every three years and must update plans each year.² As defined under S.C. Code Ann. § 58-37-10, an IRP must include:

- The utility’s demand and energy forecast for at least a 15-year period;
- The utility’s program for meeting the requirements shown in its forecast in an economic and reliable manner, including both demand-side and supply-side options;
- A brief description and summary cost-benefit analysis, if available, of each option which was considered, including those not selected;
- The utility’s assumptions and conclusions with respect to the effect of the plan on the cost and reliability of energy service; and
- A description of the external environmental and economic consequences of the plan to the extent practicable.

The statute does not establish a review or approval process for IRPs, implying that these filings are informational only.

The Commission’s requirements for IRP filings and its procedures for reviewing IRPs have evolved over the years. In 1991, the Commission adopted IRP filing and reporting procedures, including detailed requirements for the development and composition of IRP filings.³ In Order No. 1998-502, the Commission adopted a less prescriptive approach, replacing the detailed procedures and requirements contained in Appendix A of Order No. 91-1002 with a more general requirement that utilities provide information specified in S.C. Code Ann. § 58-37-10. The Commission further stated that the Commission may require additional information in IRPs so that parties may

¹ Order No. 2012-95.

² S.C. Code Ann. § 58-37-40(A).

³ See Order No. 91-1002, Appendix A.

reasonably understand the required information. Last year, in Order No. 2012-95, the Commission clarified certain procedural aspects related to the Commission's review of IRPs. First, the Commission clarified that the IRP process will constitute a proceeding under South Carolina law. Second, the Commission clarified that parties may intervene and file comments in IRP proceedings. Third, the Commission clarified that, going forward, it would determine whether a utility's IRP meets the requirements set forth in Order No. 1998-502.

While the requirements and procedures pertaining to IRPs in South Carolina have evolved over time, the fundamental nature and purpose of IRPs has stayed the same. As noted above, IRPs are the outline of the utility's current plan to meet its forecasted capacity and energy needs and reflect forecasts and assumptions made at a point in time and, therefore, by definition they are imprecise and subject to change. For example, the accuracy of a load forecast in a given IRP can be affected by numerous factors, such as the state of the economy. These forecasts get less and less accurate in the out years of the demand forecast. At the same time, one need only to look at the shale gas phenomenon to know that unforeseen circumstances can dramatically change the economics of various generation resources. It is clear that the load forecasts contained in an IRP, and the planned resource mix to meet that projected load, are not set in stone.

IRP proceedings should not be converted into a forum to micro-manage the utility's planning process – the utility must bear the primary responsibility for planning its own system in a reliable and cost effective manner, subject to a review of the reasonableness of the utility's investment and expenditures and resulting rates by the Commission. In light of the statutory requirements for IRPs and the Commission's previous orders on integrated resource planning, we recommend that the Commission clarify that IRP proceedings continue to be primarily informational, and that the Commission will use this proceeding to determine whether PEC has provided the information required by S.C. Code Ann. § 58-37-10 and Order No. 2012-95, without ruling on specific aspects or the long-term efficacy of the plan or approving (or

disapproving) the choice of specific supply-side or demand-side resources or programs discussed in the IRP. The Commission should be careful not to do anything in the IRP process that could be construed as tying its hands to fully evaluate specific resource decisions in the appropriate rate-related proceedings.

B. Observations on Certain Specific Issues in PEC's IRP

1. The IRP demonstrates that significant changes are occurring to the PEC generating system that will likely have cost implications to be considered in future rate-related proceedings

One of the most obvious conclusions that can be drawn from PEC's IRP is that PEC's generating system has entered a period of potentially significant change, after a long period of relative stability. These changes could have significant effects on the cost and nature of electric service to PEC's customers in the coming years.

For example, the IRP indicates that the Duke/Progress merger will result in changes to how PEC plans its system. PEC notes that the process of developing the IRP was begun before the completion of the Duke/Progress merger, and that both PEC and DEC prepared their IRPs separately.⁴ Accordingly, PEC developed its IRP using its own input assumptions, analytic tools, and methods. As can be expected, and as PEC recognizes, in the coming years PEC and DEC will engage in a more coordinated planning process which will reflect the effects of coordinated assumptions and analytic approaches between PEC and DEC.⁵ This coordinated approach will surely produce results different from those contained in PEC's current IRP (which again confirms the appropriateness of treating PEC's IRP as a non-binding forecast and planning document that is expected to change over time). Although coordination of effort is a laudable objective, it also underscores the need to ensure that PEC and DEC ultimately each take appropriate responsibility for their individual resource needs and that the costs of resources are appropriately allocated between PEC and DEC.

⁴ IRP at 3.

⁵ *Id.*

The IRP also discusses significant changes that are being made to PEC's generation portfolio. PEC explains that it has retired three coal units at its Lee and Sutton facilities and has built natural gas combined cycle units in their place.⁶ PEC also plans to retire its five remaining North Carolina un-scrubbed coal units at the Weatherspoon and Cape Fear sites and its one remaining un-scrubbed coal plant in South Carolina, Robinson Unit 1.⁷ PEC explains that as a result of the coal plant retirements and the new natural gas generation, PEC will have replaced approximately 1,620 MW of un-scrubbed coal generation with approximately 1,545 MW of natural gas-fired generation.⁸ Looking further out, PEC's IRP projects the addition of new combined cycle, combustion turbine, and nuclear generation, but no new coal-fired generation.⁹

The impacts of the Duke/Progress merger and the plant retirements and additions, for the most part, have not yet been specifically reflected in PEC's South Carolina rates (aside from the joint dispatch savings riders that were implemented by PEC following the close of the merger). As discussed above, this IRP proceeding is not the proper forum to rule on the specific resource decisions PEC has made or will make in the future. The prudence and reasonableness of PEC's resource decisions and the approval of the inclusion of costs of new resources in rates should be addressed in other proceedings, such as proceedings to review proposed rates and fuel costs. Nevertheless, it should be recognized that the changes discussed in the IRP will have potentially significant impacts on customers, and PEC's costs and resource decisions should be subject to detailed scrutiny and regulatory oversight in the appropriate rate-related proceedings.

The IRP also addresses "Renewable Energy Requirements." While there is no South Carolina portfolio requirement for renewable energy, PEC recites its compliance efforts with mandates written into North Carolina law in 2007 for North Carolina electric

⁶ *Id.*

⁷ *Id.*

⁸ *Id.* at 3-4.

⁹ *Id.* at 25.

utilities to acquire renewable energy. While PEC must meet its statutory compliance requirements in North Carolina, it should be recognized that the costs of renewables often exceed the costs of other viable, more cost effective resource alternatives. As a result, any proposal to recover costs related to these resources should be carefully evaluated to determine if the costs are reasonable for recovery in South Carolina rates and how they should best be recovered.

Finally, the IRP discusses PEC's new planning reserve margin minimum target and target range. Establishing a reasonable reserve margin target is important for system planning. Although PEC recently commissioned an analysis of this issue in compliance with an order by the North Carolina Utilities Commission, we believe that the reserve margin should be reassessed again once PEC has been more fully integrated into Duke. Together, the two operating companies may be able to utilize their larger size and combined resources to reduce their individual reserve requirements. As with other IRP issues, we do not recommend that the Commission make any findings on the appropriate reserve margin for PEC in this proceeding.

2. The IRP highlights the benefits provided by demand-side resources such as peak demand reduction and energy efficiency

PEC explains that since 2008, it has been developing and implementing DSM and EE programs in North Carolina and South Carolina aimed at helping customers reduce their electricity usage.¹⁰ According to the IRP, PEC's DSM and EE programs account for approximately 20% of the expected energy growth and 25% of the expected demand growth over the 2013 through 2027 study period.¹¹ By the end of the IRP's 15-year planning horizon, PEC projects that its DSM/EE portfolio of programs will provide over 1,400 MW of peak load reduction and over 3.18 billion kWh in energy savings.¹²

Nucor has consistently supported the promotion of demand side management and energy efficiency through reasonable and cost-effective DSM and EE program

¹⁰ *Id.* at 4.

¹¹ *Id.*

¹² *Id.*

options for customers who wish to take advantage of them, as well as achieving similar results through proper price signals incorporated in rate designs such as curtailable/interruptible and time-of-use rates. The effects of demand response (that is, reduction of firm peak demand, whether due to DSM programs or rate design), in particular, directly reduce PEC's firm peak load (which is the basis for PEC's capacity planning), as the load forecast included in the IRP appears to appropriately recognize.¹³ By reducing firm peak load, demand response helps to avoid or defer the need for PEC to add new capacity, as well as the reserve margin associated with that avoided capacity. Some demand response activities can provide other system benefits as well.

The mechanism for PEC to provide DSM and EE program options targeted at producing the significant energy and demand savings projected in the IRP is already in place, with PEC's EE/PDR portfolio and rider having been approved in 2009 in Docket No. 2008-251-E. In that case, a partial stipulation signed by several parties (including PEC and Nucor) described in detail the cost recovery mechanism for EE/PDR program portfolio costs and program incentives, as well as PEC's annual filing requirements associated with the EE/PDR rider. The stipulation includes a large customer opt out provision.¹⁴ After a contested evidentiary hearing, the Commission approved the stipulation.¹⁵ Importantly, in approving the large customer opt-out, the Commission concluded based on the evidence that large commercial and industrial customers have a strong incentive to implement DSM/EE measures regardless of PEC's DSM/EE portfolio, and that it is unreasonable to require such customers to pay for PEC's programs unless they specifically choose to participate.¹⁶

In the IRP, PEC expresses its strong commitment to DSM and EE.¹⁷ We support PEC continuing to make reasonable, robust and cost-effective DSM and EE programs available, subject to review of such programs and appropriate cost-recovery under the

¹³ *Id.* at 5-6; Appendix E at 15-16.

¹⁴ Docket No. 2008-251-E, Stipulation, Exhibit 1 at 8.

¹⁵ See Order No. 2009-373.

¹⁶ *Id.* at 10-11.

¹⁷ IRP at 19.

mechanism approved in Docket No. 2008-251-E, as well as continuing to offer existing and additional future rate designs established to provide the appropriate price signals to reduce firm peak demand. In the future, PEC should continue to recognize the value of these DSM/EE portfolio programs (as well as other existing rate design mechanisms such as curtailable and time-of-use rates), in lowering PEC's peak demand.

IV. CONCLUSION

Nucor respectfully requests that the Commission take these comments related to PEC's 2012 IRP into consideration.

Respectfully submitted,



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BEFORE THE
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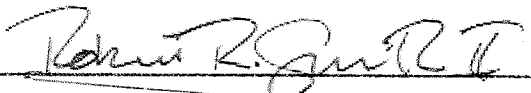
CERTIFICATE OF SERVICE

This is to certify that the foregoing document was served upon the following parties at the addresses set forth by first-class mail, telefax or Federal Express on this the 25th day of January, 2013:

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